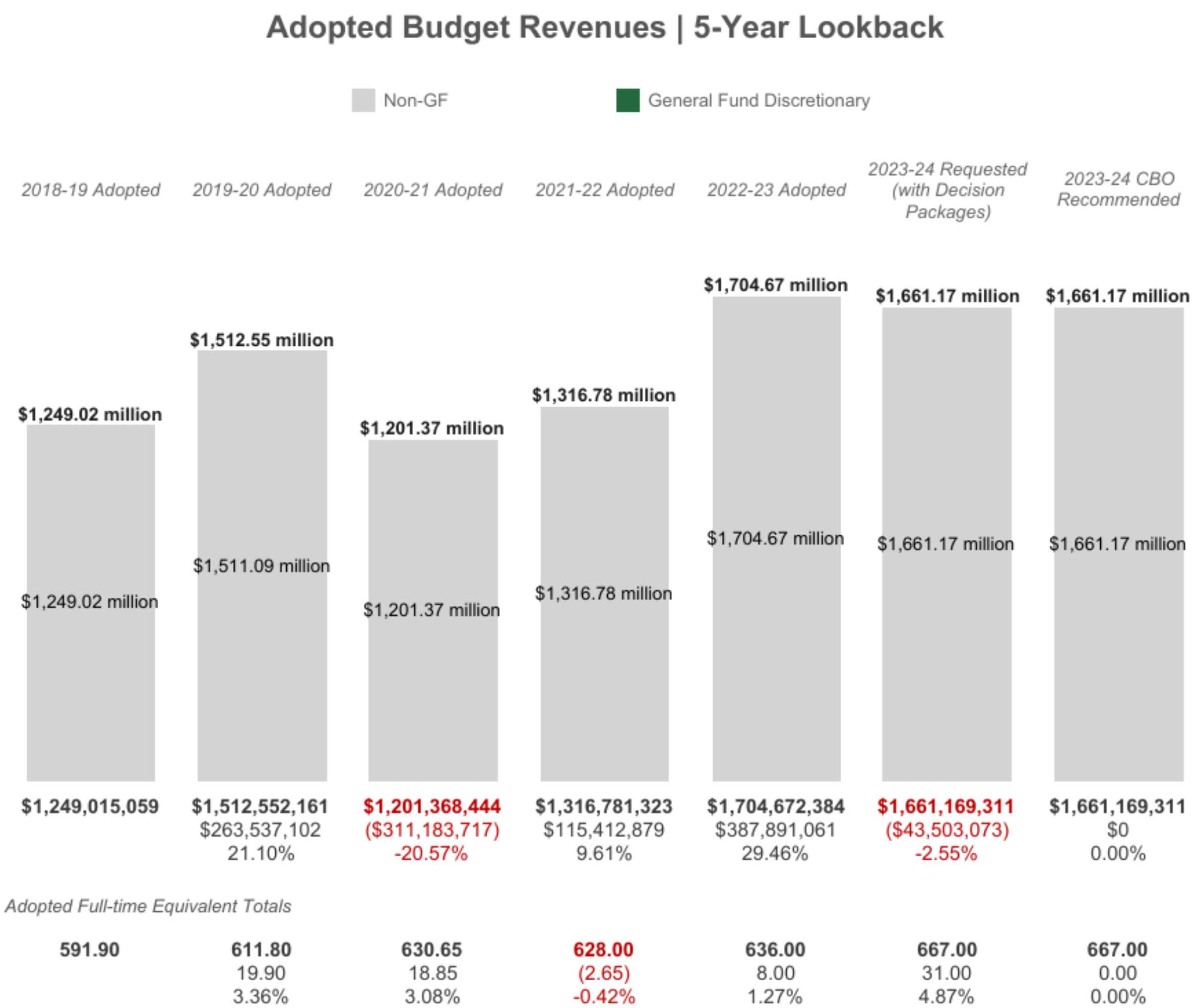
City Budget Office

Bureau of Environmental Services



EXECUTIVE SUMMARY

The Bureau of Environmental Services (BES) submitted a Requested Budget totaling $527.7 million, which includes a Sewer System Operating budget of $216.1 million and a Capital Improvement Plan (CIP) budget of $311.5 million. Overall, this is 21.5% higher than the FY 2022-23 Revised Budget. The bureau's requested budget proposes an average effective retail sewer/stormwater rate increase of 5.15% which would result in a $4.27 increase in the typical residential monthly bill, raising it from $82.83 to $87.09.

- The bureau is proposing a rate that is 2.0% higher than what was forecasted in the FY 2022-23 Revised Budget.
- The capital budget is increasing by 31% from the FY 2022-23 Revised Budget is due primarily to expense changes for the Secondary Treatment Expansion Program (STEP), which is $58 million higher than last year at $184.9 million in FY 2023-24. The total cost increase for STEP-related projects over the five-year Capital Improvement Plan is roughly $300 million.
- There are no decision packages, and the bureau is requesting 22.0 new positions, including 10.0 FTE through contract conversion, amounting to a 3.41% increase from FY 2022-23. The splash graph above states there are 31.0 new positions, but this includes 9.0 contract conversions requested by the bureau in the FY 2022-23 Fall BMP process which will be further explained below.

BASE BUDGET & KEY ISSUES

Higher Rates than Previously Forecasted

Alignment with Mayor's Guidance to Water & BES

The Mayor directed BES to submit a budget that demonstrates good value at a fair price and that any increase should be no greater than what is needed to fund critical infrastructure investments and operations that support reliable services provided by the bureau for the City and relevant natural environments. The bureau was also directed to ensure affordability of services for customers most in need by prioritizing outreach regarding current and new financial assistance programs.

Finally, if the requested budget required a rate increase above the previously forecasted increased level noted for FY 2023-24 in previous year budgets, BES should be prepared to provide options and tradeoffs to Council to keep rates more consistent with previously forecasted levels. More information on this exercise is below in the "Rate Overview" section.

Rate Overview

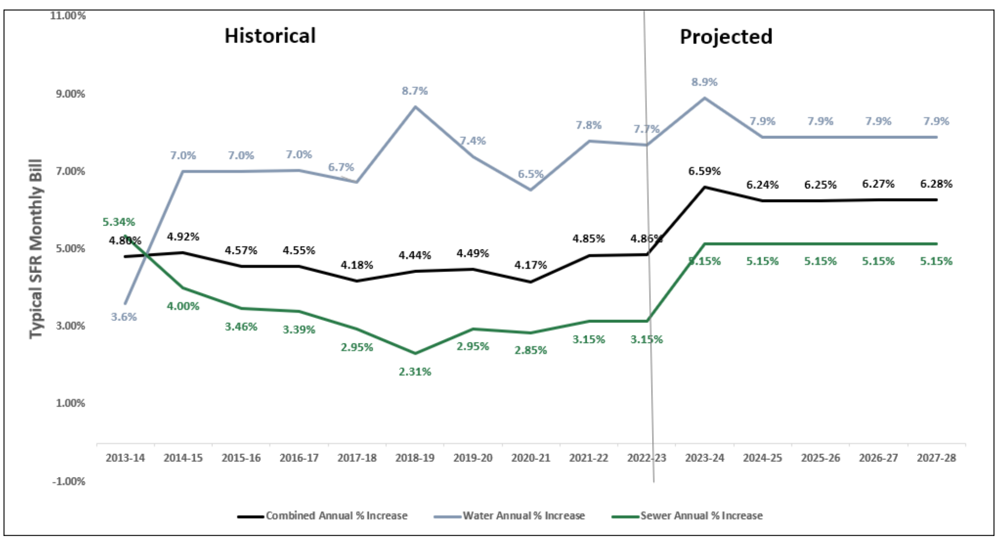


Figure 1: This chart shows past rate increases and the projected rates for the next five fiscal years.

The bureau has requested a rate increase of 5.15% for the typical single-family household.[1] This rate is 2.0% higher than what was forecasted in FY 2022-23 for FY 2023-24, which anticipated a 3.15% growth. This means the typical single family household's bill would increase by an estimated

[1] "Typical" is a reference to the average sewer flow for a single-family residential customer. For FY 2022-23, the typical sewer flow is 4.07 CCF (approximately 3,045 gallons). BES uses the phrase 'typical' instead of 'average' because no customer would really be billed 4.07 CCF, they would be billed 4 or 5 CCF."

$4.27 per month, or $12.81 per quarter. When combined with the Portland Water Bureau's requested rate increase of 8.9%, a typical single-family household would see a 6.59% increase for its combined monthly bill, adding $8.90 per month or $26.70 per quarter as detailed on the chart below.

The bureau is projecting rate increases beyond FY 2023-24 to remain at 5.15%. BES had previously forecasted a rate increase of 3.15% for FY 2025-27 but is now estimating it to be 5.15%. The primary reasons cited by the bureau for raising rates by 2.0% in FY 2022-23 is due to (1) planned inflation, (2) additional regulatory requirements, and (3) higher construction costs due to the increased cost of labor and material on capital projects. They also mention that there are internal City pressures that generated higher than expected expenses, particularly forecasted interagency agreements and General Fund Overhead (GFOH). The bureau's five-year forecast assumes that future increases on internal service provider interagency agreements and GFOH will be more in line with the escalation factors provided by the City Economist, however these methods likely to do capture increases for services as approved by Council through decision packages in overhead funded bureaus (such as the Bureau of Human Resources), or increased costs for labor bargaining agreements that are passed on to all customer bureaus.

The FY 2023-24 combined proposed rate increase for Water and BES slightly outpaces inflation of 6.3% as outlined by the consumer price index (CPI-W) observed by the Bureau of Labor and Statistics.[2] The CPI-W measures the average change in prices over time for a fixed set of goods and services. Water and sewer/stormwater services are not included in this measure, but it can be helpful to see how current water/sewer/stormwater bills compare to other items, particularly other utilities such as energy which has risen nearly 21% between January 2022 and January 2023. Given how the Water Bureau and BES's bills are weighted, the combined increase slightly outpaces inflation metrics outlined by CPI-W.

Comparison of Forecast Bill Increases
FY 2024-28 Preliminary Financial Plan vs Prior FY 2023-27 Projection

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
FY 2022-23 Financial Plan Rate	3.15%	3.15%	3.15%	3.25%	3.35%	--
FY 2023-24 Requested Financial Plan Rate*	3.15%	5.15%	5.15%	5.15%	5.15%	5.15%
Year over Year Change	0.00%	2.00%	2.00%	1.90%	1.80%	--
Monthly Typical Single-Family Bill For FY 2022-23	$82.83	$85.44	$88.13	$90.99	$94.04	--
Monthly Typical Single-Family Bill For FY 2023-24*	$82.83	$87.10	$91.58	$96.30	$101.26	$106.47
FY 2022-23 Monthly Financial Plan Rate Dollar Increase		$2.61	$2.69	$2.86	$3.05	--
FY 2023-24 Monthly Requested Financial Plan Rate Increase*		$4.27	$4.49	$4.72	$4.96	$5.21
Extra **Monthly** Expense of FY 2023-24 Requested Financial Plan Rate**		$1.66	$1.79	$1.85	$1.91	--
Extra **Annual** Expense of FY 2023-24 Requested Financial Plan Rate**		$19.88	$21.53	$22.23	$22.93	--

* As submitted by the bureau. Final FY 2023-24 and forecast increase amounts will be determined by City Council

** Estimates are based on the "Typical Single-Family Bill"

*** Excludes customer services and rates charged by Water Bureau

Figure 2: This looks at the rate increase impact on the "typical single family." The salmon color rows are connected to the previous rate forecast and the blue rows are connected to the proposed rate increase in the bureau's FY 2023-24 requested budget.

Figure 2 compares the financial impact on customers of the FY 2023-24 Requested Budget rate to what was submitted in the bureau's previous five-year plan. The bureau is rightfully cautious to submit rates above what was previously forecasted given the current economic environment. When one does the math, the overall impact is relatively small for FY 2023-24. The different of 2.0% between the two rates amounts to a typical single family seeing an additional $1.66 per month, amounting to $19.88 a year. However, as one looks four to five years out, the impact of sustained 5.15% can be seen over time as the monthly cost in FY 2026-27 is 7.6% higher. A typical single-family can expect their sewer/stormwater bill to be ~28% higher in FY 2027-28 compared to what they are paying in FY 2022-23.

Rate Stabilization Fund: The bureau has a Rate Stabilization Fund (RSF) and has internal policies to maintain a

[2] Click here for the Consumer Price Index for the West Region: Consumer Price Index, West Region — January 2023 : Western Information Office : U.S. Bureau of Labor Statistics (bls.gov)

level of cash available that covers at least 270 days of operating expenses.[3] About five years ago, the bureau accumulated a cash balance equivalent to more than 500 days of operating expenses. The bureau recently made the decision to intentionally draw down the RSF balance to align with their policy target more closely. This decision helped the bureau manage the impacts of COVID19 and helped offset the initial cost increase of STEP without increasing rates. The bureau's current RSF cash balance projection in their five-year plan would cover around 300 days of operating expenses, which is slightly above their minimum RSF balance policy.

The RSF is best employed as a reserve fund to offset unanticipated and material shocks to revenues or expenditures. The requested rate increase was made to meet the known regulatory and capital investment obligations the bureau has made, even as some future expenses are unknown – this seems like a separate set of issues that should be addressed in the budget rather than the RSF. If they used the fund to incrementally lower rates and go under the stated policy for operating expenses, the bureau would be vulnerable to effectively respond to any unforeseen macroeconomic or operational complications. The bureau plans to contribute $15 million to the RSF over FY 2026-28.

Response to Mayor's Request for Rate Options:

As part of the Requested Budget, the Mayor asked the utility bureau to present the tradeoffs of aligning their budget with the previously forecasted rate, which, for BES, was 3.15% as opposed to 5.15%. The bureau has weighed the tradeoffs and has concluded that moving forward with a 3.15% rate as opposed to their requested 5.15% rate would complicate their present and future operations in two ways:

1. First, it would result in significant and material reductions that would impact service delivery. BES contends that without the new resources from the requested rate increase, the necessary programmatic, operational, and capital expenditures made in anticipation of the rate increase would need to be funded within the current base budget or some expenditures would be delayed, thereby increasing system failure risk and compliance cost. This includes Council's recent commitment to fund the Secondary Treatment Expansion Program, a project that costs $600+ million. If the rate increases for FY 2023-24 through the five-year plan is not adopted, the bureau projects a $120 million impact that would need to be covered within existing programs and that amount could not be absorbed without deep cuts in operations and capital projects.
2. Second, if the rate increases for FY 2023-24 through the five-year plan are not adopted, the bureau anticipates more pronounced rate spikes to cover known yet unknown cost pressures facing the bureau. BES contends that gradually increasing rates allows the bureau to get ahead of large future regulatory and capital investment obligations – particularly Portland Harbor, Columbia Slough, and the Tryon Creek Wastewater Treatment Plant with Lake Oswego.

Changes to Non-Capital Operating Expenditures in the Operating Fund

The bureau has recently looked to convert resources set aside for contract positions to support ongoing positions within the bureau. Often the bureau uses higher cost contracted positions for particular skills for a specific part of a project. The bureau requested 9.0 FTE from the Fall BMP and another 10.0 FTE in the FY 2023-24 Requested Budget. If the 10.0 FTE are approved, then the bureau will have resources set aside to support 12.0 contract. The bureau does not have current plans to convert these 12.0 contract FTE into ongoing positions. These changes reduce the bureau's reliance on long-term contracted positions and provides opportunities for those converted positions to be treated more equitably, either regarding benefits or status within projects.

[3] This is considered adequate by rating agencies for similar sized utilities.

CIP Impact on Rates

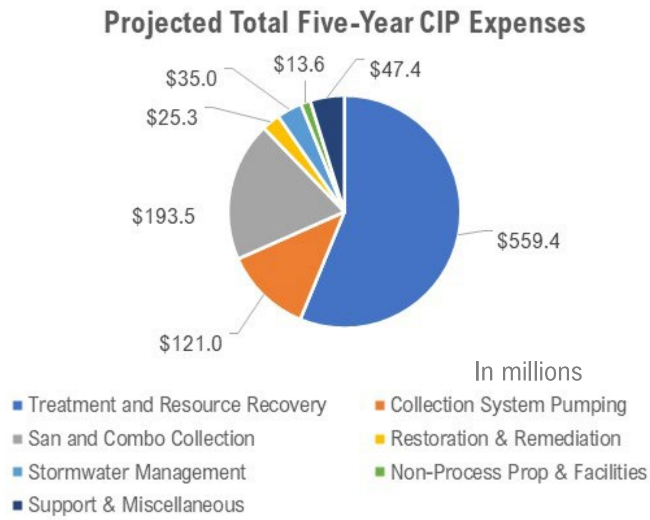


Figure 3: Perspective on what the bureau will focus on over the next five years.

The bureau's five-year Capital Improvement Plan (CIP) includes approximately $995 million in wastewater and sewer system investment needs. Focusing on FY 2023-24, the bureau's requested CIP budget totals $311.6 million, which is 30 percent higher than FY 2022-23's budget. The increase is primarily driven by the Secondary Treatment Expansion Program (STEP), where the bureau plans to spend $184.9 million. As one can see in Figure 3, STEP and related resource recovery projects make up ~56 percent of the five-year CIP, even as expenses are expected to drop off in FY 2025-26 (see Figure 4). More information about the STEP project can be found below in the section "Cost Pressures."

The City's infrastructure bureaus continue to share information and collaborate on best practices related to managing assets across their life cycle. Based on a recent City Infrastructure Investment Work Session,[5] BES is more advanced across seven categories than many other City infrastructure bureaus included in this cycle: Asset Management (AM) Fundamentals, asset information, service levels, risk management, life cycle costs, financing, and reporting & evaluation. Based on an internal assessment, the bureau sees two bodies of work to improve their asset management maturity framework:

1. Further develop and mature the bureau's asset management system and practice: the bureau plans to help address this by dedicating 1.0 FTE in the bureau's newly established Strategic Asset management Program, 3.0 FTE in the Portfolio Management Program, and the equivalent of 2.0 FTE to temporarily support this work. The bureau would ideally like to bring on permanent FTE to help advance the maturity of this work.
2. Perform work activities to improve the bureau's asset condition and address the backlog of asset reinvestment needed: the bureau acknowledges that their knowledge and maturity in asset management varies widely across its asset portfolio. This wide variation leads to asymmetries that make it challenging to compare information across asset classes to discern investment needs and opportunities.

This work is essential to the long-term health of the bureau and has a potential impact on customers. BES estimates that the capital funding needed to address asset investment backlog and to conduct sustainable operation and maintenance was estimated to be $5.45 billion based on the 2021 Citywide Assets Report.[7] The bureau plans to use internal training and tools to offset some of the expenses, but they acknowledge that investing in this work often leads to knowledge of more significant resource gaps. These factors will put pressure on rates to meet operational and capital funding needs in coming years but have not been made concrete based on other financial pressures facing the bureau (see below).

[5] Click here for more information related to this conversation with Council: Citywide Infrastructure Investments: Findings and Recommendations Work Session

[7] For more information, click here: 2021 Citywide Assets Report // City of Portland, Oregon. Per the 2021 report: "BES has estimated a total capital need of $5.45 billion which is annualized on a 10-year basis to $545 million per year to bring service levels up to a point of sustainability. The average annual CIP funding for the next 5 years is $190.5 million. The difference between the need and available funding is approximately $354.5 million. The current annual CIP funding is less than 1% of the value of the asset base $22.5 billion. Best practices indicate that at least 2-3% annual reinvestment is required to adequately maintain a system."

Cost Pressures

Secondary Treatment Expansion Program (STEP)

The two main features of the STEP project are two new clarifiers that will increase the Columbia Boulevard Wastewater Treatment Plant's secondary treatment capacity[8] and new solids processing facilities to replace old assets and increase capacity to year 2045. It is the largest improvement project at the treatment plant since the 1970s.

The City's Mutual Agreement and Order (MAO) with the Oregon Department of Environmental Quality (ODEQ) requires the CBWTP to treat all the combined sewage while meeting water quality standards with the purpose of protecting water quality, public health, and the environment. Per the agreement, expansion of secondary wet weather treatment capacity is required for captured Combined Sewer Overflows (CSOs) sent to the CBWTP during storm events. The effort also includes the replacement of two secondary treatment clarifiers by calendar year 2024, as well as long overdue solids processing for effective plant operation and to meet permit requirements.

On August 24, 2022 the bureau brought an emergency ordinance to expand the construction agreement with Kiewit Infrastructure West Co and authorize funding up to $515 million for the bureau to finalize work for STEP.[9] It represented a significant increase in projected project costs for STEP, a project required under a Mutual Agreement and Order with the Oregon DEQ. In October of 2020, the bureau was given the authority to enter into the first phase of construction with the Guaranteed Maximum Price Agreement (GMP) of $100 million for phase 1 while notifying Council of action in 2022 for an estimated projected cost of nearly $300 million for phase two through FY 2026-27 in their CIP at 30% design level completion.[10] Once the project reached 100% design level completion, the bureau requested an expanded GMP not to exceed $515 million, amounting to a $215 million dollar increase for phase two of STEP between 30% design completion and 100% design completion. The bureau was aware the price of the project was going up between 30% design completion and 100% design completion but was not able to formally update their CIP between the FY 2022-23 and FY 2023-24 budget submissions. The service level and value of the project to the City has not changed, but previously unknown costs were realized when the design level estimate reached 100%.

The bureau cited economic conditions over the design phase and unforeseen inflation as primary drivers for the increased projected costs. Additional pressures include supply chain interruptions, trucking and shipping cost increases, and labor and contractor availability. The bureau looked at different ways to manage costs and increase revenue, including rescoping or deferring other projects as well as developing an Intergovernmental agreement with the Port of Portland. They also mentioned cost-containment strategies such as diligent value engineering,[11] finding savings in their operating budget, considering the impact of bond issue sizing, and cutting existing programs.

Once the emergency ordinance passed and initiated the Notice to Proceed on September 6, 2022, the bureau began the process of balancing an additional $215 million across the bureau's previous five-year financial plan and CIP in preparation for the FY 2023-24 Requested Budget. They were able to submit a balanced CIP during the FY 2023-24 requested budget by making several tradeoffs. The bureau began reprioritizing projects across their suite of several hundred projects by pushing out projects with lower levels of urgency, consequence, and delivery considerations. Portfolio Management staff performed analysis and consult subject matter experts across the bureau in 2022 and put together a condition assessment report along with a recommendation for the bureau to shift priorities towards several key portfolios including the wastewater

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[8] To learn more about this process, click here: https://www.portland.gov/bes/resource-recovery/wastewater-treatment

[9] BES brought this request as an emergency ordinance because of the time-sensitive nature of the sub-contractor bids forming the basis of the Guaranteed Maximum Price, which were good for 60 days. Failure to act quickly would have resulted in a higher Guaranteed Maximum Price for Council to approve.

[10] 30% design level completion for this project meant projections could be -80% or +130% construction cost estimates.

[11] Examples provided by the bureau include ground improvements means and methods ($17 million), excavated spoils disposal ($6.2 million), raise clarifies 10 feet, reduce size to 145 feet diameter ($5.7 million)

treatment and collections pumping portfolios. Based on these recommendations, staff representing Operations & Maintenance, Strategy, Engineering, Planning, and PMO met at the end of 2022 and reassessed project prioritizations across the CIP. Projects were assigned varying levels of criticality based on urgency, risk, and delivery considerations. Additional refinement of these recommendations are ongoing and take into consideration staff and resource availability, budget constraints, project delays, emergency projects, asset failures, as well as other known and unknown conditions we might run into throughout delivery. Tradeoffs have resulted in many sewage, stormwater, and restoration projects considered both urgent and high-risk being postponed. These delays increase the risk of significant consequences to human health and safety, regulatory compliance, the environment, and the community as the likelihood of asset failure continues to increase over time.

Further, additional efforts include modifying the structure/timing of bond sales, looking at alternative funding formats including loan forgiveness options with organization such as The Clean Water State Revolving Fund Program, and exploring opportunities for delivery efficiency including project bundling and process/efficiency improvements

Projects of this scale also provide valuable financial and resume-building opportunities for certified Minority-Owned Business Enterprises, Women-Owned Business Enterprises, Disadvantaged Business Enterprises, Emerging Small Businesses, and Service-Disabled Veteran Business Enterprises (M/W/DBE/ESB/SDVBE). According to the bureau, this has already created opportunities at the planning, design and construction and startup phases of the project - $13.3 million for 39 different M/W/DBE/ESB businesses before the GMP was established Fall 2022. When forecasting the diversity of subcontracts for the project, the bureau estimates that the M/W/DBE/ESB projected contract value to be $79 million across 80 different businesses. Figure 4 shows the projected ethnic breakout for the $79 million. This project is also anticipated to provide 750,000 planned project craft hours that are invaluable to help new employees get the hours required to get accredited in order to pursue future regional projects that are similar in nature.

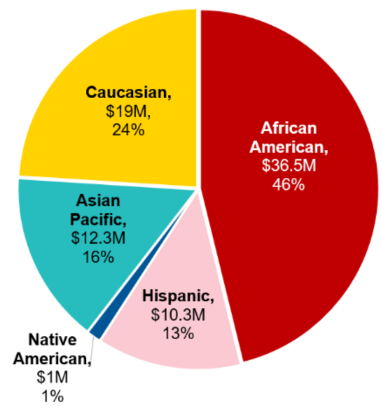

Figure 4: Projected resources awarded to different ethnic diversity of contractors working on STEP

The bureau anticipates construction to continue through FY 2023-24 and believes the project is on target to finalize the secondary clarifies by December 2024 in accordance with the bureau's MAO with ODEQ. All work related to the project but not required by the MAO is anticipated to be completed by December 2025.

Portland Harbor Superfund

Portland Harbor was listed as a federal Superfund cleanup site in December of 2000. The City is included in the list of more than 150 parties identified by the Environmental Protection Agency (EPA) as being potentially responsible for cleanup work and cost. In 2001, the City of Portland and nine other potentially responsible parties entered an administrative order with EPA obligating them to finance and complete the Remedial Investigation and Feasibility Study (RI/FS) under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This work has been completed.

In 2019, the Superfund process continued into the Remedy Design phase.[14] To meet the City's obligation for this phase of the cleanup process, the City and State of Oregon entered into an agreement with the EPA to make funds available to third parties to complete remedial design work. The City's financial obligation to that agreement is now complete. The City also partnered with other public and private parties to complete design work at the Willamette Cove site, the River Mile 11 site and for the Portland Harbor Information Management System (IMS). Work on these three projects is under administrative order and overseen by the EPA and are making good progress.

[14] For more information on what Remedy Design entails, click here: Portland Harbor Superfund Site

The FY 2023-24 budget request aims to continue the remedy design work under agreement with EPA. The bureau anticipates they will reach completion of the IMS project and reach 30% design at both the Willamette Cove Site and River Mile 11 in FY 2023-24. Because the Superfund cleanup process is heavily influenced by external factors such as EPA oversight, individual site negotiations and the legal settlement processes, the City has very little control over the cleanup timeline. The bureau notes they are still a few years away in the legal process to know how much they will be required to pay and what work they will be responsible for.

Bureau/Fund[1]	**FY22/23**[2]	**FY23/24**[3]	**FY24/25**	**FY25/26**[4]	**FY26/27**
BES (60%)	636,000	1,392,000	1,392,000	1,002,000	300,000
Water (5%)	73,000	116,000	116,000	83,500	25,000
Prosper (8%)	116,800	185,600	185,600	133,600	40,000
PBOT (16%)	233,600	371,200	371,200	267,200	80,000
GF (11%)	160,600	255,200	255,200	183,700	55,000
Total	**$1,220,000**	**$2,320,000**	**$2,320,000**	**$1,670,000**	**$500,000**

Columbia Slough

Columbia Slough was identified as a high priority Oregon DEQ Cleanup Site in the early 1990's. DEQ issued an Order of Consent obligating the City to finance and complete the Remedial Investigation and Feasibility Study (RI/FS) for 19 miles and 12 miles of side channel under the state Environmental Cleanup Law. The RI/FS was completed in 2005. Since 2006, the City has entered into a series of Intergovernmental Agreements (IGA) to meet the requirements of the DEQ's record of Decision.

The City is currently performing work to meet the requirements of the 2020-2025 IGA with DEQ. Requirements include Stormwater ROW treatment for 16 priority stormwater outfall basins; three projects have been constructed, three are completing 60% design with planned construction in 2023; and 10 are in the pre-design/integrated planning process. Requirements also include Pollutant Source Identification and Source Control Evaluation. The City is actively sampling and analyzing pollutant levels within the City's storm system and where it discharges to the slough from selected City outfall basins. The City also provides education and outreach regarding the Oregon Health Authority fish advisory under the IGA with DEQ. Current stormwater treatment design and construction costs are planned at approximately $7 to $9 million per year to complete the 13 approved projects.

The FY 2023-24 Requested Budget supports the ongoing Columbia Slough IGA r required work and the development of the Columbia Slough Sediment Cleanup Program's 15-Year Plan. The 15-Year Plan will clearly define specific DEQ requirements for completing work required under the ROD and obtaining regulatory closure and long-term environmental and legal protections for the City from DEQ. Because the cleanup process can be heavily influenced by external factors such as EPA and DEQ oversite, partnership negotiations and the legal settlement processes, the City has very little control over the timeline of DEQ approval of the 15-Year Plan. The estimated cost of the proposed Columbia Slough 15-Year Plan is subject to change based on the status of DEQ negotiations.

Affordability Programs

Since the bureau is proposing a rate increase higher than what was previously forecasted, further scrutiny will likely fall on the affordability programs offered. The bureau, often in conjunction with PWB, continues to offer a strong suite of financial assistance programs including flexible bill pay, interest-free payment plans, conservation rebates and kits, and technical assistance for commercial customers looking to use water more efficiently.

To further understand affordability, Citywide performance measures on utility bill affordability were recently added for the FY 2021-22 during the budget development process. These measures calculate the annual combined utility bill as a percentage of various income levels (mostly the lowest quintile), household types (single family residential vs. all households), and discount levels (Tiers 1 and 2). Typical single-family customers eligible for Tier 1 have receive a 50% discount on their bills, while Tier 2 customers receive an 80% discount. Data on actuals for FY 2021-22 pointed towards slightly downward trends for all six of these new measures, which was an indication of affordability; however, percentages have since rebounded to levels close to FY 2020-21 actuals. Targets for next year are not yet available as they are dependent on census data which is expected to be released in Spring 2023.

Annual Combined Utility Bill as a percentage of …	FY 2019-20 Actual	FY 2020-21 Actual	FY 2021-22 Actual	FY 2022-23 Estimate	FY 2023-24 Target
Median household income	2.40%	2.25%	2.25%	2.43%	N/A
Lowest quintile of household income	6.22%	5.81%	5.52%	6.12%	N/A
Lowest quintile of household income with Tier 1 discount	3.46%	3.18%	3.05%	3.35%	N/A
Lowest quintile of household income with Tier 2 discount	1.81%	1.67%	1.57%	1.69%	N/A
Lowest quintile of single-family residential household income with Tier 1 discount	2.11%	2.02%	1.85%	2.00%	N/A
Lowest quintile of single-family residential household income with Tier 2 discount	1.10%	1.06%	0.95%	1.01%	N/A

The lowest represents the lowest fifth of incomes (1%-20%) made by households. The utility bureaus selected the lowest quintile of income based on work conducted by national organizations such as the National Association of Clean Water Agencies and the Federal Environmental Protection Agency. One of the conclusions from the data is that customers who receive bill discounts end up paying percentages of their income very similar to those in the median household income range. This means that, when accessed, the City's financial assistance programs are helping low-income households pay their utility costs at roughly the same percentage as higher-income households.

It is critical to determine the most effective ways to expand accessibility of the program, as the customers in the lowest quintile of income who cannot access financial assistance are paying twice the percent of their income as the median household. These customers are either unaware of the financial assistance program or are ineligible to access it based on current program constructs. The bureau is expanding access to Portlanders in this category who could not previously access these forms of financial assistance through the Regulated Affordable Multifamily Assistance Program (RAMP).

BES and Water launched the Regulated Affordable Multifamily Assistance Program (RAMP) as a pilot and have included funding for the program in their FY 2023-24 Requested Budget.[15] This program represents a positive step forward to expanding financial assistance to include renters in multi-family residences by providing up to a 50% discount on sewer/stormwater services and 20 percent discounts on utility services for properties enrolled in the Portland Housing Bureau's Non-profit Limited Tax Exemption (NPLTE) Program. PWB has included a limited-term position to help implement this program.

Customers living in multi-family residences of any kind have historically been challenging to reach because the landlord, not the tenant, typically receives the bill and therefore excludes tenants from existing financial assistance programs.

Total Program Costs	Annual Cost
Sewer Discount	$3,383,746
Stormwater Discount	$609,136
Water Discount	$781,992
Administrative Costs	$120,000
Home Forward Discontinuation	-$600,000
Total	**$4,294,874**
Annual Impact to Typical Single-Family Customer	**$10.23**

The table on the left summarizes the financial implications for the program. The cost of the program takes two forms: program administration and foregone revenue. BES projects foregone revenue to be $3,992,882 and PWB projects foregone revenue to be $781,992. Further, PHB is projected to receive $80,000 to cover the additional administrative services placed on their program and PWB projects to carry $40,000 of the billing, analysis, and other associated administrative costs. Because the bureaus are forgoing revenue to establish this program and support vulnerable populations in the NPLTE program, this has an impact on rates for those who can pay. What follows is the approximate rate percentage increase to offset the foregone revenue: BES at 0.92% and Water at 0.20%. Combined, this means the average single family will pay an additional $10.23 per year to support this program.[16] Meanwhile, the program estimates the discount under RAMP will be $325 per unit per year, which equates to a four percent rent reduction for a family of three at 30% Median Family Income.[17]

The RAMP program will replace resources previously set aside for the Home Forward multifamily eviction prevention program, which the bureau and BES funded at $600,000 during the previous fiscal year. The Home Forward program was a pilot set to expire June 2023 and provided multi-family emergency rental assistance through annual vouchers for up to $650 every 12 months. The bureaus determined that the program's administrative cost relative to the reach and impact was high. The Home Forward and RAMP programs are similar in that they benefit tenants in multifamily units that are not eligible for existing financial assistance programs due to an indirect relationship to utility billing. They are different in that Home Forward provided benefits directly to tenants at risk for eviction while RAMP indirectly benefits tenants by providing discounts to nonprofits that manage multi-family dwellings that presumably will be passed on to tenants. They are also projected to have a different scope of impact, because the Home Forward program was only available to tenants in multifamily housing in the Home Forward case management program, while the NPLTE program has more available households who could benefit from the program. The bureaus estimate the Home Forward program supported 84 households in FY 2022-23 while the RAMP program is expected to help up to 15,000 households per year. While it is not an inherent weakness to the program, the program's reach remains limited as NPLTE housing units represent 12 percent of multifamily housing units in the City.[18]

The bureaus are taking steps to ensure the program helps this historically underserved and vulnerable population. Because the RAMP program partners with PHB's NPLTE program, the program will use the same application process and data collected by the NPLTE. Furthermore, the NPLTE program has built-in accountability measures that requires that landlords benefiting from the RAMP program reduce rents and

[15] Single-family units enrolled in the NPLTE are not presently eligible for the RAMP discount, but are eligible for a suite of other programs that can be found here: https://www.portland.gov/water/water-financial-assistance/apply-financial-assistance

[16] There are two other vantage points to see the impact of this program on ratepayers. It will cost the average single family an additional $0.85 per month, or $2.56 per quarter when most customers receive their bill.

[17] See https://www.portland.gov/phb/nplte, Water Financial Assistance

[18] See Water Financial Assistance

describe how they will pass on the financial benefit to their tenants. The bureaus are also discussing the development of a series of performance measures for the program including number of households that benefited from the program, demographic information of participants, identification on how the RAMP discount benefits tenants, amount of actual benefit per household, and ability of non-profits to successfully pass the discount to tenants. If the program is to move from pilot to an ongoing program for the utility bureaus, its progress and efficacy must be carefully tracked. CBO recommends the bureau finalize these performance conversations with the necessary stakeholders to ensure the pilot can be properly evaluated as a financial assistance and equity-advancing program.

CAPITAL IMPROVEMENT PLAN

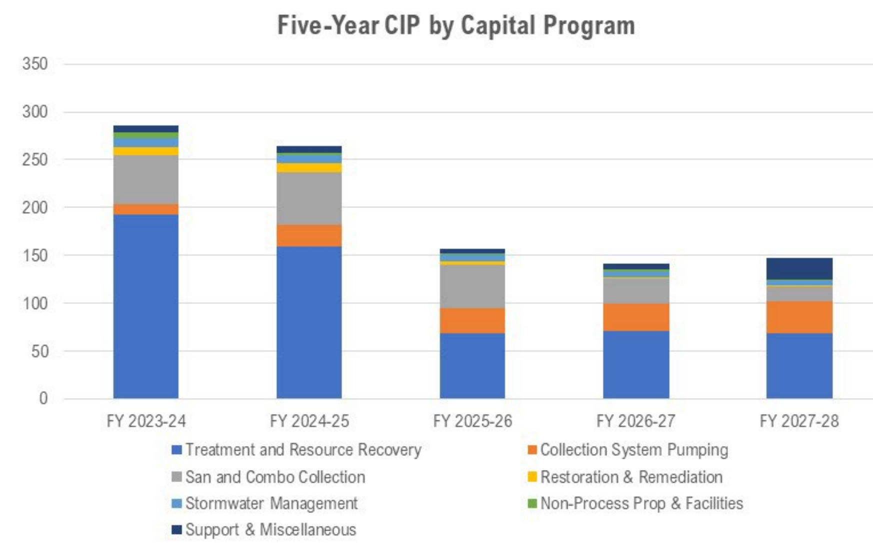

Figure 5: Perspective on how the bureau prioritizes projects over the next five years

As noted above, the bureau's five-year CIP budget is $311 million, which is 30% higher than FY 2022-23's five-year CIP. The difference is largely attributed to the revised GMP numbers described in the section above on STEP. Figure 5 reflects the bureau's planned capital *expenditures*, which is revised slightly lower at 92% of the budget. Most of the CIP's expenses over the next three years are related to STEP, with peak construction happening in FY 2023-24 and FY 2024-25. Other work, including the Columbia Wastewater Treatment Plant Wet Weather Clarifier and Hypochlorite Modification Project ($100 million from FY 24-31) is also planned in the Treatment and Resource Recovery portfolio, which comprises nearly 60% of the total CIP over the next five years at $591 million. The second largest category of projects in the bureau's portfolio is the Sanitary and Combined Collection portfolio ($204 million), which includes projects for capital repair and replacement of collection pipes. The Collection System Pumping portfolio is third largest at $125 million, in part to inspect, design, and implement improvements to the system. The bureau has set aside $27 million over five years for the Restoration and Remediation portfolio which includes projects that meet regulatory requirements and watershed health objectives. The other categories include the Stormwater Management Portfolio ($36.6 million), Non-Process Properties and Facilities ($14.3 million), and Support and Miscellaneous which includes the Advanced/Automated Metering Infrastructure expanded on below.

Tryon Creek Wastewater Treatment Plant (TCWTP)

The TCWTP treats an annual daily average of six million gallons per day. The City of Lake Oswego shares in the cost of operations and maintenance of TCWTP and is exploring redevelopment of the plant site by building and operating a new alternative plant nearby. If this plan goes through, the financial arrangements between the two cities would necessarily change. Currently, BES owns and manages TCWTP with Lake Oswego paying as a customer.[19] If the land procurement is successful and the anticipated public-private partnership

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[19] The bureau submitted an ordinance in FY 2022-23 that amends the IGA with the City of Lake Oswego to build a new wastewater treatment facility in Lake Oswego to replace the Tryon Creek Wastewater Treatment Plant (TCWTP). The cost of the amendment is anticipated to have up to $11 million in total value, with $5,923,000 in cash and $5,077,000 which is the value for undepreciated assets as TCWTP forgiven, satisfying the language of the IGA. of depreciation and assets-in-program expense owed to Portland from Lake

constructs a new wastewater treatment plant, then future City Council action would be required to approve a new IGA. The bureau's current five-year financial plan anticipates that TCWTP will be decommissioned and reflects corresponding payments to Lake Oswego for a new treatment plant. The current five-year plan does not reflect a pivot back to the initial arrangement where the bureau would assume more responsibility.

The FY 2023-24 budget includes $3.7 million for design and consulting work related to the Tryon Creek Wastewater Treatment Plant.

Advanced/Automated Metering Infrastructure

In conjunction with Water, the bureau has completed preliminary analysis of the assistance of a consultant on how smart meter technology could affect the bureau and the community it serves. The project will have two phases: 1) Design and Procurement, and 2) Implementation and Management.

This system allows the bureau to perform more frequent and regular meter readings. This project has two components.

1. Install necessary network technology including smart meters, data management systems, and communication networks that enable two-way communication between utilities and customers and provide usage information more frequently.
2. Implement a robust customer portal that supports the customer engagement and equity goals of PWB and BES.

One of the primary goals for the project is to use the technology to move customers to monthly billing. The data gathered by the technology could grant retail customers a more refined ability to control their water use through enhanced monitoring capabilities and granular data points.

However, the bureau recognizes that there are equity components to this project. They will need to be intentional to teach retail customers how to best leverage the technology, especially to those who are not used to accessing online portals for information or to pay bills. They also highlight the need to adopt digital justice principles related to accessing information and technology, participatory decision making, right to privacy, and data consent. Further, most customers are on a quarterly billing schedule, so this service could benefit retail customers who live paycheck to paycheck.

The bureaus are in phase one and looked to authorize a contract with Diameter Services on February 8th to get the project underway.[20] This program is funded by BES with Water and is included in both bureau's five-year CIP as they equally share the estimated total cost of $93 million for the project. The bureau's CIP sets aside $36.1 million over the next five years for the project with the remaining portion occurring outside the five-year window.

FIVE YEAR FINANCIAL PLANS

The bureau's five-year plan outlines a series of projects where the financial impact is uncertain and ranked them according to their potential impact on the forecast. These projects include: (High Risk) Portland Harbor Superfund obligations, Columbia Slough, long-term asset management needs, economic outlook and inflation, Willamette Basin Total Maximum Daily Load future conditions, future rate decreases, and National Pollution Discharge Elimination System permit renewals and (Medium) Tryon Creek Wastewater Treatment Plant asset replacement, Water Pollution Facilities permit policy changes, Underground Injection Control program changes, and interest rates. Lower-level risks to the forecast include expansion of low-income assistance programs, seismic resilience, MS4 permit renewal, permit compliance fines, customer growth, and City

Oswego forgiven. TCWTP was financed over a long time-period, and under the current arrangement, any BES investment in Tryon Creek obligates Lake Oswego to pay a portion of those expenses. These resources will pay the City of Portland's portion of the project site acquisition and will be covered by contingency in the FY 2022-23 Spring BMP.

[20] See Ordinance 191167 | Portland.gov

development activity. The bureau raised rates to fund the known anticipated cost of covering these challenges. Further, the bureau ranked these uncertainties based on potential impact to the forecast.

Looking specifically at the five-year forecast, the bureau notes updates on expenses and revenues:

1. Expenses: First, concerning operating expenses: the bureau anticipates personnel service costs to increase 5.5% in FY 2023-24 and 3.5% in FY 2024-25 through the five-year forecast. Further, they expect external material and service costs to increase 6.1% and internal material and service costs to increase 3.2% over the forecast. Second, plans for CIP expenses can be seen in the section above.
2. Revenues: The bureau saw declining revenues from the commercial sector during the pandemic but expect growth to return to historical averages over the five-year forecast. Generally, the bureau is expecting a 5.6% increase in revenues through a combination of rate increases and a modest recovery from pandemic-related impacts to billing. The bureau anticipates a decline in System Development Charge revenues that were positively affected by the pandemic but are expected to return to stabilizing pre-pandemic levels in FY 2024-25.

SUMMARY OF REQUESTS & RECOMMENDATIONS (ALL FUNDS)

Bureau of Environmental Services

		2022-23 Adopted Budget	2023-24 Requested Base (A)	Bureau Decision Packages (B)	CBO Recommended Adjustments (C)	Total Recommended Budget (A+B+C)
Revenue	Miscellaneous	$6,850,500	$8,892,500	$0	$0	$8,892,500
	Licenses & Permits	$1,821,000	$1,821,000	$0	$0	$1,821,000
	Intergovernmental	$862,500	$1,035,500	$0	$0	$1,035,500
	Interagency Revenue	$1,787,180	$2,395,030	$0	$0	$2,395,030
	Fund Transfers - Revenue	$518,574,234	$577,714,108	$0	$0	$577,714,108
	Charges for Services	$420,016,552	$418,578,141	$0	$0	$418,578,141
	Bond & Note Proceeds	$385,000,000	$0	$0	$0	$0
	Beginning Fund Balance	$369,760,418	$650,733,032	$0	$0	$650,733,032
Revenue	**Sum:**	**$1,704,672,384**	**$1,661,169,311**	**$0**	**$0**	**$1,661,169,311**
Expense	Personnel	$97,415,926	$108,775,295	$0	$0	$108,775,295
	Internal Materials and Services	$58,100,890	$61,067,389	$0	$0	$61,067,389
	Fund Transfers - Expense	$526,618,108	$586,123,548	$0	$0	$586,123,548
	External Materials and Services	$105,763,628	$133,074,765	$0	$0	$133,074,765
	Debt Service Reserves	$55,484,917	$38,884,918	$0	$0	$38,884,918
	Debt Service	$186,450,395	$163,570,752	$0	$0	$163,570,752
	Contingency	$497,072,020	$336,260,736	$0	$0	$336,260,736
	Capital Outlay	$177,766,500	$233,411,908	$0	$0	$233,411,908
Expense	**Sum:**	**$1,704,672,384**	**$1,661,169,311**	**$0**	**$0**	**$1,661,169,311**